



# Stormwater Management Program Plan

March 2020



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**Introduction:**

This document has been prepared to meet the City of Des Moines' Western Washington Phase II Municipal Stormwater Permit requirement for written documentation of the City's Stormwater Management Program (SWMP).

The City's SWMP is intended to reduce the discharge of pollutants from the City's Municipal Separate Storm Sewer System (MS4) to the maximum extent practicable (MEP), meet Washington State, All Known, Available and Reasonable methods of Treatment (AKART) requirements, and protect water quality. This goal will be accomplished by the inclusion of all permit SWMP components and implementation schedules into the City's existing SWMP.

Where the City is already implementing components called for in this permit, the City will continue those actions or activities to the existing extent required, regardless of the schedule called for in this document.

The City will implement an ongoing program for the gathering, tracking, maintaining and using information to evaluate the SWMP development, implementation and permit compliance and to set priorities. This document will be updated annually for submittal with the City's Annual Report to Ecology.

2020 is the first full year of the approved 2019-2024 Permit. As such, this document will reflect the City's plans for the updated compliance requirements with the 2019-2024 Permit, as issued by Ecology.

**Planned Actions for 2020****1: SWMP Management and Administration (Section S5.A)**

The City plans to fully comply with the management and administration requirements as described in Section S5.A of the Permit. These requirements include, but are not limited to:

- Develop and implement the SWMP
- Annually update the SWMP Plan
- Track costs or estimated costs for implementing the SWMP
- Track inspection, enforcement and public education activities
- Continue to implement existing programs
- Coordination among Permittees

**2: Stormwater Planning (Section S5.C.1)**

- a. Inter-disciplinary Team (S5.C.1.a)

By August 1, 2020, the City will convene an inter-disciplinary team to inform and assist in the development, progress, and influence of the stormwater planning program. The City is contracting with a consultant, Parametrix, to support the formation of an Inter-Disciplinary Long-Range Planning Team.

b. Coordination with Long-Range Plans Update (S5.C.1.b)

In 2020 the City is contracting with a consultant, Parametrix, to provide two reports. The first describing how the City used stormwater management needs and protection/improvement of receiving water health to inform the planning update processes and influence policies and implementation strategies during the 2013-2019 permit term. The second describing how water quality is being addressed during this permit term (2019-2024) in updates to the Comprehensive Plan.

c. Low Impact Development Code-Enforcement (S5.C.1.c)

The City will continue to require LID Principles and LID BMPs when updating, revising, and developing new local development-related codes, rules, standards, or other enforceable documents, as needed. In 2020 the City will assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs since local codes were updated in accordance with the 2013 Permit, and the measures developed to address the barriers.

d. Stormwater Management Action Planning (SMAP) (S5.C.1.d)

In 2020 the City is making initial efforts to meet the Receiving Water Assessment requirement that is due by March 31, 2022. The City is participating with the Our Green Duwamish group in creation of a regional watershed mapping tool.

### **3: Public Education and Outreach Program (Section S5.C.2)**

a. General Awareness (S5.C.2.a.i):

In 2020 the City plans to maintain the existing public education and outreach programs below:

- Distribution of education materials through various forms of media including, but not limited to, the City's website ([www.desmoineswa.gov](http://www.desmoineswa.gov)), quarterly citywide newsletters, municipal code, televised council meetings, and handout materials. Educational materials include information on septic system maintenance, oil leak

inspection, preservation of plants and trees adjacent to streams and wetlands, pet control and waste disposal, pesticide reduction, lawn fertilizer reduction, car washing tips, general stormwater education, volunteer opportunities, household BMPs, business BMPs, hazardous waste disposal, and many other topics.

- In 2020 the City of Des Moines is planning on continuing its partnership with the Environment Coalition of South Seattle (ECOSS) on the Puget Sound Spill Kit Program to provide selected businesses with free spill kits, training, and education on stormwater BMPs. By providing this service to the businesses the City will help build general awareness and encourage behavior change. Also, previously visited businesses will be re-visited in 2020 for post survey follow-ups. ECOSS will also be able to provide the City with measurable data for behavior change as survey questions will be asked during the initial and post visit.
- In 2020, the City is planning to continue its Car Wash Kit Program. Community car wash events are encouraged to use a “Car Wash Kit” available to check out from the City’s Public Works Department free of charge.
- In 2020, the City will pursue the continuation of the partnership with King County Hazardous Waste Program to visit businesses in the City that generate hazardous waste. Spill kits will be handed out as needed, information about stormwater BMPs, and hazardous waste storage and disposal tips will be given.
- In 2020, the City plans to support, host, and continue the planning towards the next Highline StormFest taking place. “This project will create and enhance the implementation of alternative stormwater education curriculum in high-risk school districts across the state. City of Burien and the StormFest Committee will organize and host a three 3-day Stormwater Festivals where all 6<sup>th</sup> grade students within Highline Public Schools can participate in hands-on stormwater education and activities encouraging behavior changes that assist local municipalities within the district in meeting their NPDES permit requirements.”

b. Evaluate Effectiveness of Ongoing Behavior Change (S5.C.2.a.ii)

- In 2020, the City plans to use the continued partnership with ECOSS to evaluate the effectiveness of ongoing behavior change on a region wide scale. By July 1, 2020 the City will conduct a new evaluation of the effectiveness this campaign, documenting lessons learned and recommendations for S5.C.2.a.ii.(c).

c. Stewardship (S5.C.2.a.iii):

The volunteer storm drain marking program will continue in 2020 and act as the primary stewardship program in the City.

The City plans to support additional stewardship events including an annual clean-up event, farmer's market visits, and Earth Day events.

#### **4: Public Involvement and Participation (Section S5.C.3)**

a. Opportunities for Public Participation (S5.C.3.a):

The city will continue to provide opportunities for public comment/input on the SWMP Plan. The SWMP Plan will be posted to the website for comments to be submitted.

b. Availability of Documents (S5.C.3.b):

In 2020, the annual report for this permit which is due March 31<sup>st</sup> and the SWMP Plan will be posted on the City website ([www.desmoineswa.gov](http://www.desmoineswa.gov)) no later than May 31<sup>st</sup>.

#### **5: MS4 Mapping and Documentation (Section S5.C.4)**

a. Ongoing Mapping (C5.4.a):

In 2020 the City will continue its ongoing GIS mapping of the MS4. The Stormwater Crews, who complete catch basin inspections will continue to highlight discrepancies between the map and the physical asset in the field. Also in 2020 the City will support its GIS mapping of new assets in the MS4 by refilling a vacated Surface Water Engineering Technician position; whose primary role will be improving and updating the City's GIS map.

b. New Mapping (C5.4.b):

The City has already begun collecting the size of all known outfalls meeting the January 1, 2020 deadline. The City will continue to collect size and material of these outfalls in addition to its normal routine mapping.

#### **6: Illicit Discharge Detection and Elimination (IDDE) (Section S5.C.5)**

a. IDDE Reporting & Correcting (S5.C.5.a):

The City will continue to use the procedures currently in place for reporting and correcting or removing illicit connections, spills, and other illicit discharges when they are suspected or identified.

b. IDDE Public Awareness & Notification (S5.C.5.b):

The City will continue to inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste. The City encourages citizens to call the Public Works Department at 206-870-6523; police department non-emergency number at 206-878-3301 to report illicit discharges and spills. These phone numbers are publicly listed on the City website and through various other means of outreach.

c. IDDE Ordinance (S5.C.5.c):

Existing Codes will be maintained with no planned changes in 2020. The City adopted an IDDE Ordinance in compliance with the permit requirement, effective September 12, 2009. This ordinance is codified as Chapter 11.20 of the Des Moines Municipal Code.

d. Ongoing IDD&E Action Program (S5.C.5.d):

In 2020 the City plans to maintain the existing IDDE programs below:

- IDDE Field Screening: The City has implemented a field screening methodology for illicit connections using *“Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments”*, Center for Watershed Protection, October 2004. This field screening methodology will be documented in the Annual Report. The City has developed a program to meet the field screening requirements, at least 12% of the MS4 will be screened in 2020. The approach of dry weather field screening monitoring nodes will be used to complete the screening.
- In 2020, the City will maintain the ongoing IDDE Action Program. The City is currently using IDDE procedures from the *“Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments”* to characterize the nature and environmental threat posed by illicit discharges and also to trace the source of illicit discharges. Procedures for eliminating the source of discharges are currently being developed. When the City or the investigations agency determines surface water quality pollution has occurred, a notice is sent to the property owner stating the problem be remedied within a time frame listed in out code. The cleanup and enforcement depend on severity of the spill.

e. Training (S5.C.5.f):

The City’s NPDES Coordinator is the lead for identification, investigation, termination, cleanup, and reporting illicit discharges; including spills, improper disposal and illicit connections. IDDE training is currently accomplished through the EXCAL VISUAL training video “IDDE: a grate concern”. The City will continue to implement IDDE training as needed in

2020. Follow-up training will be provided as needed to address changes in procedures, techniques or requirements. All training records (including course information and the staff training) will be documented and maintained in Microsoft Access.

f. Recordkeeping (S5.C.5.g):

The City will track and maintain records of the activities conducted to meet the requirements of this section. City staff will continue to evaluate and improve the IDDE program based on experience, lessons learned, and feedback from public education efforts. The Cityworks asset management program is used as the primary record keeping platform for spill response. Microsoft Access is used as the primary record keeping platform for training records.

## **7: Controlling Runoff from New Development, Redevelopment and Construction Sites (Section S.5.C.6)**

a. Ordinance (S5.C.6.b.iii):

The City will maintain the existing program designed to reduce pollutants in stormwater runoff to the MS4 from new development, redevelopment and construction site activities. The City adopted the 2016 King County Surface Water Design Manual (KCSWDM) as the Surface Water Design Manual for the City of Des Moines: DMMC 16.10.350.

b. Local Program for New Development (S5.C.6.c):

The City will maintain the existing permitting process with plan review, inspection and enforcement capability to meet the standards listed in i. through viii, in the permit under section S5.C.6.c, for both private and public projects, using qualified personnel.

c. Long-term Operation and Maintenance (S5.C.6.c.iv):

The City will maintain the existing program to ensure inspection and maintenance of private facilities in new residential developments are being performed.

d. Availability of NOIs (S5.C.6.d):

The City's Community Development Department will continue to make available copies of the "Notice of Intent for Construction Activity" and copies of the "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment. The City enforces local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.



e. Training (S5.C.6.e):

The existing training program per S5.C.6.e will be maintained. Trainings will be conducted in house and by other agencies, such as the Department of Ecology and the Washington Stormwater Center.

## **8: Municipal Operations and Maintenance (Section S5.C7)**

a. Maintenance Standards (S5.C.7.a):

Existing maintenance standards will remain established in 2020. The City has adopted the 2016 King County Surface Water Design Manual (KCSWDM) for maintenance standards for all publicly owned facilities: DMMC 16.10.350.

b. Maintenance of Stormwater Facilities regulated by the Permittee (S5.C.7.b):

The City will continue to inspect and require timely maintenance of stormwater treatment and flow control BMPs/facilities that fall under this permit section.

c. Maintenance of Stormwater Facilities owned by the Permittee (S5.C.7.c):

The City plans to maintain its ongoing program for annual inspection and maintenance of municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. No changes or additions will be made to the post-storm inspection program in 2020. The City plans to inspect half of all known catch basins and inlets owned by the City in 2020. City crews are inspecting with I-Pads in the field and scheduling required maintenance as needed. The City will continue to use its asset management program, Cityworks, to track inspections associated with this section of the permit.

d. Reducing Stormwater Impacts (S5.C.7.d):

The City will continue to use the adopted King County Site Management Plan as the City's practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the City.

e. Training (S5.C.7.e):

Training under this section will continue on an as needed basis.

f. Stormwater Pollution Prevention Plan (SWPPP) (S5.C.7.f):

The City's Planning, Building and Public Works Department developed and implemented a Stormwater Pollution Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or

operated by the City. The SWPPP includes periodic visual observation of discharges from the facility to evaluate effectiveness of BMPs.

g. Recordkeeping (S5.C.7.g):

No changes to the existing record keeping program will be made in 2020.

**9: Source Control Program for Existing Development (Section S5.C8)**

a. Implement a Program to Prevent & Reduce Pollutants (S5.C.8.a)

The City will continue to use ECOSS for existing development education in 2020. A source control program will be developed by the deadlines set in the permit.

**10: Monitoring and Assessment (Section S8)**

a. Reporting:

The City will provide any monitoring or stormwater-related studies conducted by the City during the reporting period in the annual report.

b. Regional Status and Trends Monitoring:

The City shall pay \$5,104 into a collective fund to implement RSMP small streams and marine nearshore status and trends monitoring in Puget Sound. The payment into the collective fund is made annually to Ecology.

c. SWMP Effectiveness and Source Identification Studies:

The City shall pay \$9,329 into a collective fund to implement RSMP effectiveness studies. The payment into the collective fund is made annually.

**Section 11: Reporting Requirements**

- a. No later than March 31st of 2020, the City will submit an annual report. The reporting period for the annual report will be from January 1, 2019 through December 31, 2019. The City will submit annual reports electronically using Ecology's WQWebDMR.
- b. The City will continue to keep all records related to the Permit and the SWMP for at least five years.
- c. The City will continue to make all records related to the Permit and the City's SWMP available to the public at reasonable times during business hours. The City will provide a copy of the most recent annual report to any individual or entity, upon request.

- d. The 2019 annual report for the City will include the following.
1. A copy of the City's current SWMP Plan as required by S5A.2.
  2. Submittal of the annual report form as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of the permit during the reporting period.
  3. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this permit during the reporting period. Refer to appendix 3 for annual report questions.
  4. If applicable, notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under this permit.
  5. Certification and signature pursuant to G19D, and notification of any changes to authorization pursuant to G19.C.
  6. A notification of any annexations, incorporations or jurisdictional boundary changes resulting in an increase or decrease in the City's geographical area of permit coverage during the reporting period.